



Evaluate The Knowledge, Attitude and Practice of General Population Regarding Management of Chronic Pain

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Abstract: *Chronic pain is defined as pain that persists for 3 months or longer, often continuing beyond the expected time of healing, for the management of chronic pain people usually choose different methods such as pharmacological and non-pharmacological treatments. This study aimed to analyze the knowledge attitude and practices of general population regarding management of chronic pain. This study used a quantitative research design to evaluate the knowledge of general population regarding management of chronic pain. An Online survey-based approach was employed to gather data on affects and management of chronic pain. A total sample size of 73 participants, including medical and non-medical population was selected using random sampling. Statistical analysis was performed using SPSS version 20 to examine the data the result shows that many more than 50% of population has knowledge about chronic pain and they choose medication as a method for managing the chronic pain, it shows that respondents with lower monthly incomes (less than 50,000) are less likely to visit doctors for pain management, with the majority reporting "never" or "rarely. The study mostly involves younger individuals, particularly females aged 18-25, with many being students and from lower-income backgrounds. Pain management is predominantly through medications like Panadol, with NSAIDs as a secondary option. Many participants neglect diagnostic tests, due to financial constraints and lack of access to effective treatments are major challenges in managing chronic pain.*

Keywords: Chronic pain, Pain management, Knowledge, Attitudes and Practices (KAP), Analgesic use

Introduction

Chronic pain is defined as pain that persists for 3 months or longer, often continuing beyond the expected time of healing. Unlike acute pain, which is typically temporary and linked to an injury or illness, it can occur without a clear cause or may persist after the initial cause has been treated.

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It can affect any part of the body and is often associated with conditions like arthritis, fibromyalgia, and nerve damage. The pain can significantly impact daily functioning, leading to physical, emotional, and psychological distress. It is often difficult to manage and may require a combination of medical treatments, physical therapy, and psychological support. People with chronic pain may experience depression, anxiety, and sleep disturbances. Treatment approaches aim to reduce pain and improve quality of life, but managing chronic pain often requires a personalized and multidisciplinary approach.

Prevalence of Chronic Pain in Individuals

Chronic pain is defined as pain that persists for longer than three months and can affect various parts of the body, including joints, muscles, and nerves. Its prevalence is remarkably high across different populations, significantly influencing public health globally. The most common forms of chronic pain include conditions such as osteoarthritis, back pain, and headaches, which can lead to disability and reduced quality of life.

Global Prevalence

Studies have shown that chronic pain affects an estimated 20% of adults worldwide, with variations depending on geographic region, age, and gender. A large-scale survey found that nearly one in five individuals in the general population experiences chronic pain, with rates increasing among older adults [1].

Age and Gender Differences

The prevalence of chronic pain is higher in older adults, with an increased incidence in those over the age of 60. Additionally, women are more likely to report chronic pain than men, with conditions like fibromyalgia and chronic migraine showing a significant gender difference [2].

Impact of Chronic Pain on Quality of Life

Chronic pain has a profound effect on individuals' physical, psychological, and social well-being. Those suffering from chronic pain often experience difficulties in work, social activities, and mental health, including anxiety and depression [3].

Pharmacological Treatment for Chronic Pain

Pharmacological treatment is one of the most common approaches to managing chronic pain. The goal of pharmacotherapy is not only to relieve pain but also to improve the patient's quality of life and ability to function. Various classes of medications are used depending on the type, severity, and underlying cause of the pain. These include non-opioid analgesics, opioid, adjuvant medications, and topical treatments. The choice of medication often involves a comprehensive assessment to tailor the treatment to the individual patient's needs [4].

Non-pharmacological Treatment for Chronic Pain:

While pharmacological treatments are often the first line of defense in managing chronic pain, non-pharmacological therapies are increasingly recognized as essential components of comprehensive pain management strategies. These treatments focus on addressing the physical, psychological, and social aspects of chronic pain. Non-

pharmacological interventions can help reduce the reliance on medications, particularly opioid, and may enhance overall well-being [5].

Impact of Lifestyle Modifications on Chronic Pain Management

Lifestyle modifications play a significant role in the management of chronic pain. Adopting healthier habits can reduce the intensity of pain, improve overall function, and decrease reliance on medication. While pharmacological treatments are essential, lifestyle changes address the underlying causes and the multifactorial nature of chronic pain. These modifications can also improve the psychological and emotional well-being of individuals, which is often intertwined with chronic pain experiences [6].

Methodology

Study design

We conducted a cross-sectional, online Knowledge– Attitude–Practice (KAP) survey of adults residing in Pakistan between October 1, 2024 and December 31, 2024. The study aimed to assess public knowledge, attitudes, and practices regarding chronic pain and its management.

Participants: eligibility and recruitment

Inclusion criteria: (i) age ≥ 18 years; (ii) self-reported history of chronic pain (pain ≥ 3 months) and/or current use of analgesic(s); (iii) residence in Pakistan; (iv) Ability to complete an online questionnaire in <English/Urdu>.

Exclusion criteria: (i) age < 18 years; (ii) acute pain only; (iii) not currently managing pain. These match the criteria listed in the original manuscript.

The questionnaire was built in Google Forms and distributed via WhatsApp broadcast lists, Facebook groups/pages, Instagram stories, email lists, and university/community networks>. We used a non- probability convenience/snowball sampling strategy (open survey link). To broaden reach and reduce selection bias, we shared the link across diverse groups (health and non-health audiences)

Search strategy

Statistical analysis was performed using SPSS version 20 to examine the data and formulate graphical figures. A total sample size of 73 participants, including medical and non-medical population was selected using random sampling.

Study eligibility

Inclusion Criteria

- Adults aged 18 years and above
- Individuals suffering from any kind of chronic pain
- Individuals currently using any kind of pain killers.

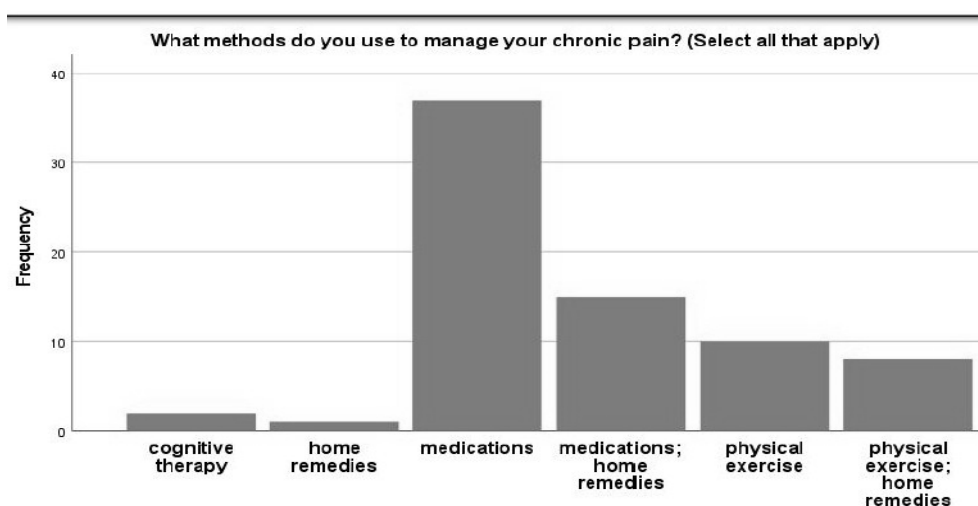
Exclusion Criteria

- Individuals under the age of 18.

- Individuals having any kind of acute pain
- Individuals not managing their pain.

Result

Most respondents (68.5%) are aged 18-25, followed by smaller proportions in the 33-40 (15.1%) and 26-32 (9.6%) age groups, with only 6.8% being above 40. This indicates that the study predominantly represents younger individuals. Students make up the largest proportion of respondents (49.3%), followed by employed individuals (30.1%) and homemakers (11%), reflecting a diverse mix of educational and professional backgrounds. The majority of respondents (46.6%) have a monthly income of less than 50,000, followed by 27.4% earning between 50,000 to 100,000. Higher income brackets are less represented, indicating that most participants fall into lower-income categories.



The figure 1 illustrates the frequency of various methods used to manage chronic pain. Medications are the most commonly utilized method, followed by a combination of medications and home remedies. Physical exercise ranks next in popularity, while combinations of physical exercise with home remedies and home remedies alone are less frequently used. Cognitive therapy is the least commonly reported method. This suggests a strong reliance on medications and mixed approaches for pain management

What challenges, if any, do you face when managing your chronic pain?

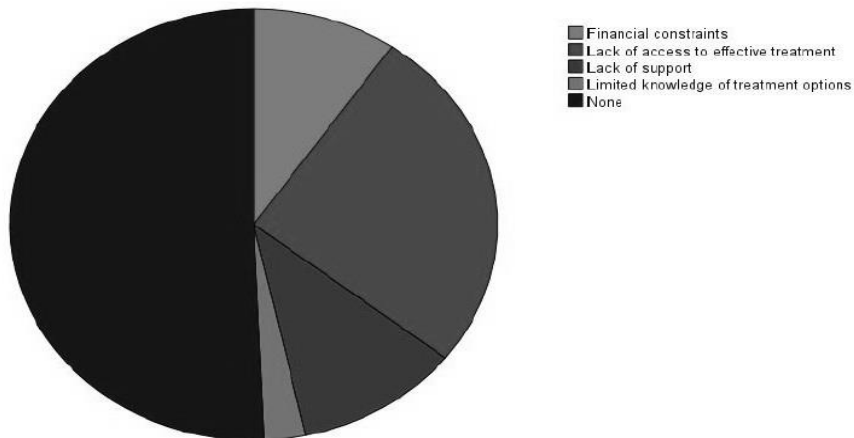


Figure 5: Challenges faced while managing chronic pain

This Figure 5 shows the challenges faced by individuals in managing chronic pain. The majority of respondents reported no challenges, as indicated by the largest segment. Among those who did face challenges, the most significant was a lack of access to effective treatment, followed by financial constraints, lack of support, and limited knowledge of treatment options. This highlights the importance of improving accessibility and awareness of effective pain management strategies.

What is your monthly income range? * How often do you visit a doctor for your pain management?

Cross tabulation

		How often do you visit a doctor for your pain management?				Total
		never	occasionally(a few times a year)	Rarely	regularly(once or twice a month)	
What is your monthly income range?		1	1	0	0	2
	100,000 to 150,000	2	2	3	0	7
	150,000 to 200,000	1	0	0	1	2
	50,000 to 100,00	6	4	8	2	20
	above 200,000	5	2	1	0	8
	less than 50,000	13	8	11	2	34
Total		28	17	23	5	73

The cross-tabulation shows that respondents with lower monthly incomes (less than 50,000) are less likely to visit doctors for pain management, with the majority reporting

"never" or "rarely." As income increases, the frequency of doctor visits generally improves, though very few across all income levels visit "regularly." This suggests that financial constraints play a significant role in access to pain management services, highlighting the need for more affordable healthcare options.

Discussion

Chronic pain involves factors like age, gender, income, and profession among others, all bundled up to be classified as chronic pain. The examination of the given data provides insights into these relationships [7].

Identifying these associations is crucial for defining suitable approaches in the management of chronic pain and, therefore, the patients' improvement. The information concerning medicine dependency is evidence of the difficulties in treating chronic pain. The cross-tabulation results reveal a differential pattern of use of various drug classes, with some being used more often. For instance, opioids used for the management of severe pain bring many challenges due to their addictive properties, tolerance, and dependence. The result illustrated the side effects experienced by individuals taking pain medication, focusing on symptoms like acidity, nausea, stomach pain, and combinations of these, as well as those reporting no side effects [8]. The data revealed a significant issue in chronic pain management: many individuals report rarely or never adhering to prescribed medical tests. This finding aligns with challenges, the complexity of managing chronic pain, particularly when conditions lack a clear structural cause. Such cases can lead to frustration, skepticism, and diminished trust in medical interventions. Understanding these barriers is essential to fostering better adherence and improving patient outcomes. In addition, careful monitoring of age-related changes in physiologic functions is needed, as they may impact drug plasma concentrations and increase susceptibility to adverse events.[9] When traditional pharmacologic agents (such as acetaminophen and nonselective nonsteroidal anti-inflammatory drugs) are deemed inappropriate in high-risk patients because of ineffectiveness or side effects, physicians must consider the use of alternative drugs, such as coxibs, which have comparable efficacy to traditional analgesics, with a superior side effects profile.

Our study highlights that most participants rely on medications, particularly over-the-counter analgesics such as paracetamol, for chronic pain management. This finding is consistent with reports from European and Asian populations, where non-opioid analgesics are also the most commonly used first-line therapy for chronic. However, reliance on medication without adequate medical supervision raises concerns regarding inappropriate use, side effects, and lack of multimodal management.

Financial constraints emerged as a major barrier, with lower-income respondents less likely to seek medical consultation. Comparable barriers have been documented in global pain surveys, where socioeconomic status strongly influences healthcare-seeking behavior. Our findings reinforce that improving access to affordable care is critical for effective pain management.

We also observed that younger females (18–25 years, many of them students) represented the majority of our respondents. Previous studies similarly report higher chronic pain prevalence among women and younger adults, particularly in conditions such as migraine and fibromyalgia. This demographic trend may reflect both biological susceptibility and greater willingness to report symptoms.

Conclusion

The study primarily reflects a younger demographic, with most respondents being

females aged 18-25, predominantly students and some employed individuals. The sample largely consists of lower- income participants, with nearly half earning less than 50,000 monthly. Pain management is mostly medication-based, with Panadol being the most used, followed by NSAIDs, while alternative treatments like cognitive therapy and physical exercise are less frequently utilized. Many participants fail to adhere to medical recommendations for diagnostic tests, and although most do not experience significant side effects from medications, mild gastrointestinal issues are the most common. Challenges in managing chronic pain are mainly attributed to financial limitations and lack of access to effective treatments, with chronic pain being triggered by a combination of physical, emotional, and environmental factors such as stress, poor posture, and insufficient sleep. Financial constraints are a key barrier to accessing adequate pain management services, highlighting the need for more affordable healthcare options.

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